

Ichthyological Notes

By GILBERT P. WHITLEY, F.R.Z.S.

(Contribution from the Australian Museum.)

(Figs. 1-7.)

Order SELACHII.

COOPERODON, gen. nov.

Cooperella Gunnell, Journ. Paleont. vii, 1933, p. 291. Orthotype, *C. typicalis* Gunnell. Preoccupied by *Cooperella* Carpenter, Rept. Brit. Ass. Adv. Sci. 1864 (1865), pp. 611 & 639, a genus of Mollusca.

More than sixteen years ago I (Whitley, Austr. Nat. x, 1940, p. 243) pointed out that *Cooperella* was preoccupied, but it has not been renamed until now, when I propose *Cooperodon* to replace it, with *Cooperodon typicalis* (Gunnell, 1933) as type-species. Contact with Gunnell is no longer possible, according to Wilimovsky (Journ. Paleont. xxviii, 1954, p. 693) who brought in *Gunnellodus* for *Idiacanthus* Gunnell, preöcc.

Family MACQUARIIDAE.

Genus PERCALATES Ramsay & Ogilby, 1887.

PERCALATES COLONORUM NOVEMACULEATUS (Steindachner).

(Fig. 1.)

Dulus novemaculeatus Steindachner, Sitzb. Akad. Wiss. Wien liii, 1866, p. 428, pl. ii, fig. 1. Port Jackson.

The Eastern Freshwater Perch or Australian Bass is here illustrated from a photograph of a specimen from the Woy Woy district in Mr. Eric Worrell's aquarium. This form is found in eastern New South Wales and the Snowy River waters of Victoria.

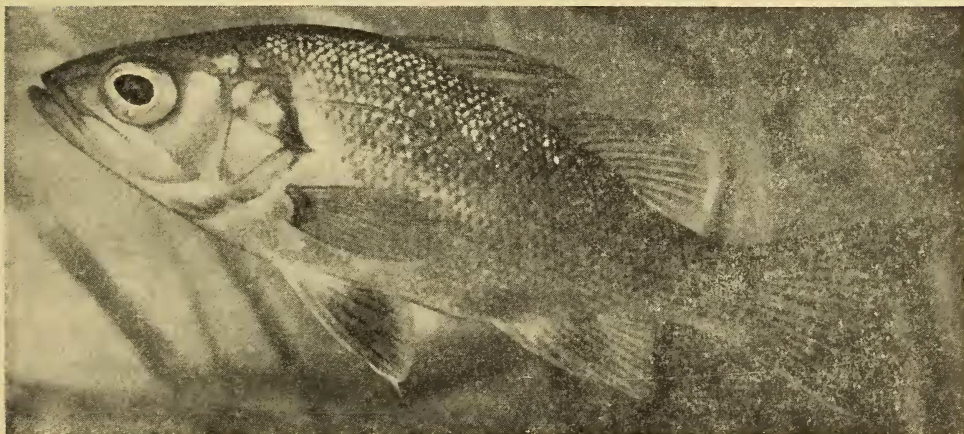


Fig. 1: Australian Bass from the Woy Woy district, New South Wales.

Photo, Eric Worrell.

Family PRENIDAE.

Genus PRENES Gistel, 1848.

PRENES ORNATUS (Cuv. & Val.).

(Figure 2.)

- ? *Chaetodon argus* Linne, Syst. Nat., ed. 12, 1766. p. 464. India.
 ? *Chaetodon pairatalis* Buchanan, Fish. Ganges, 1822, pp. 122 & 372, pl. xiv, fig. 41. Ganges.
Scatophagus ornatus Cuvier & Valenciennes, Hist. Nat. Poiss. vii, April 1831, p. 143, pl. clxxx. Amboina.
Scatophagus argus Gunther, Ann. Mag. Nat. Hist. (3) xx, 1867, p. 59 (Cape York & Sydney). *Id.* Castelnau, Proc. Linn. Soc. N. S. Wales ii, 1878, p. 234, and of later Australian authors, also as *Ephippus argus*.
Scatophagus tetracanthus Macleay, Proc. Linn. Soc. N. S. Wales ii, 1878, p. 353 and Descr. Cat. Austr. Fish. i, 1881, p. 96 (Port Darwin). Not *Chaetodon tetracanthus* Lacepede, Hist. Nat. Poiss. iv, 1802, p. 726, vernac. in vol. iii, 1802, pl. xxv, fig. 2. No loc., an African species.
 ? *Scatophagus multifasciatus* var. *altermans* Castelnau, Proc. Linn. Soc. N. S. Wales iii, 1878, p. 47. Norman River, Queensland.
Scatophagus quadranus De Vis, Proc. Linn. Soc. N. S. Wales ix, 1884, p. 455. [Cardwell] Queensland. Spelt *S. quadratus* by authors.
Scatophagus rubifrons Stoye, Tropical Fish for the Home, 1932, pl. clxv, from a trade name in aquarium journals for a fish supposedly from the East Indies, *vide* Myers, Proc. Biol. Soc. Wash. xlix, 1936, p. 84. United with *ornatus* by Fraser-Brunner, Aquarist, viii, 1938, p. 72.
Scatophagus argus var. *rubrifrons* Innes, Exotic Aquar. Fish., 1935, p. 427, coloured figs. East Indies.
Desmoprenes tetracanthus Whitley, Austr. Zool. ix, 1940, p. 424 (Northern Territory, *ex* Macleay) and xi, 1945, p. 41 (North-west Australia). Not *Chaetodon tetracanthus* Lacepede.
Prenes quadranus Whitley, Proc. Roy. Zool. Soc. N. S. Wales 1954-55 (1956), p. 41.

This little "Scat" of the Brisbane River, a favourite with aquarists, has not been satisfactorily classified because of the uncertainty of specific limits in the genus *Prenes* or *Scatophagus*. It seems to be *ornatus* but whether this is the young of *argus* Linne (which seems doubtful) or not is uncertain. I therefore offer a description and figure of "aquarium-size" specimens under the above tentative identification rather than bestow a new name at this stage.

D xi, 16; A. iv, 15; P. 17; C. 16.

Head (11 mm.) 2.4, depth (16) 1.6 in standard length (26).

Eye (4.5) equals interorbital, 2.4 in head. General facies as figured.

Preorbital and the narrow suborbital meeting at a shallow notch.

Rudiments of the suprascapular spine and its knot are present, but other larval head-bones have disappeared. Gill-membranes united across isthmus in a free fold. Body compressed. Scales minute. Lateral line complete. Dermal part of pelvis fairly broad, tapering to near isthmus.

A procumbent dorsal spine; erect dorsal spines heteracanth, the third and fourth longest (6 mm.) nearly one-third body-depth. Posterior margins of soft dorsal and anal subvertical. Pectoral and caudal rounded.

Colour in alcohol mostly dark brown except for the pectoral, caudal and soft dorsal and anal fins which are yellow or transparent, and some yellow or cream areas [? red in life] on the front of the head, and on the body below the front and rear dorsal spines and above the anal spines. Two dark brown oblique, separate bars on interorbital; an ocular band over each eye meets its fellow dorsally. Other dark markings tend to form rows of dark brown to blackish spots, as figured, with obscure outlines and faint creamy interspaces. Spinous dorsal and anal fins and soft ventral fins mostly blackish.

Described and figured from a specimen slightly over 1½ inches (33 mm.) in total length. Austr. Mus. Regd. No. IB.82.

Loc.—Brisbane, Queensland, Mr. A. K. Carter, (1939).

Variation.—Two other Brisbane specimens (IB.79), 24 and 28 mm. long, are similar, but the body-markings tend to form five vertical bars down body and caudal peduncle, apart from the bands down the head. D. xi, 17; P. 16. Mouth barely reaching below eye.

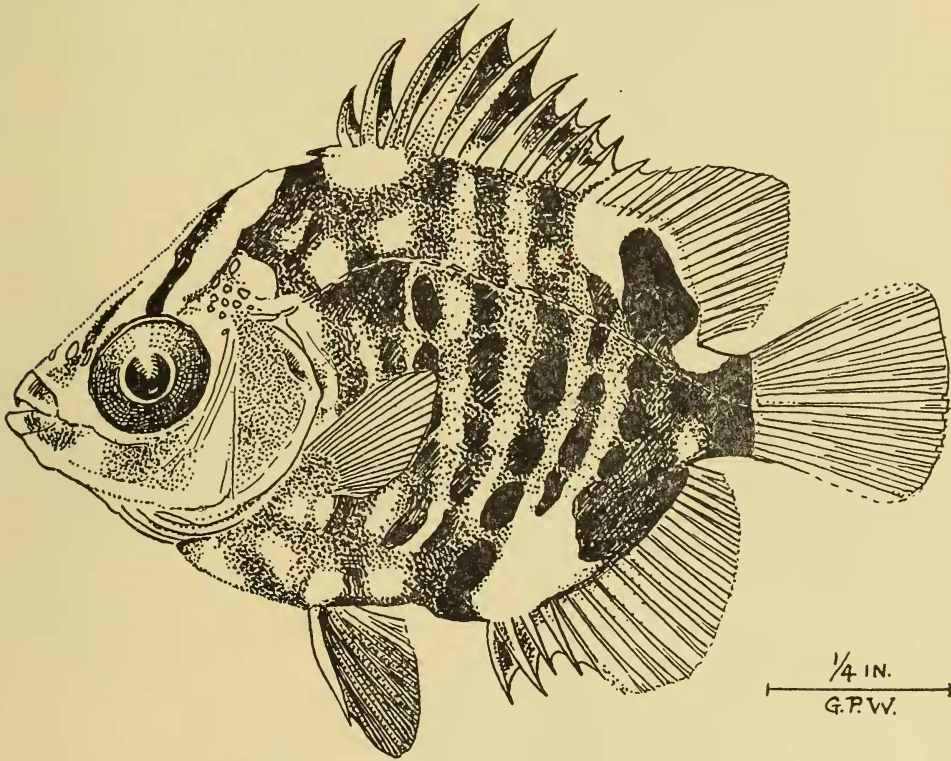


Fig. 2: Small Scat, *Prenes ornatus*, from Brisbane River, Queensland.

Another (IB.83), 40 mm. long, also from Brisbane, has dark brown spots on the sides over a light brown ground-colour, but the cream areas descending from the front and back dorsal spines and ascending over the anal spines still persist.

Three specimens from Townsville (IB.3501), 37 to 47 mm. long, have 6 to 8 transverse rows of spots.

The juvenile coloration is still present in a 51 mm. specimen (IB.535) from Grafton, N. S. Wales, but at 80 mm. the sides are spotted as in the Indian argus (IA.7970 from Noosa River, Queensland).

My largest specimen of the figured form, 69 mm. long (IA.5898), is from Groote Eylandt, Northern Territory.

This "large" specimen has procumbent spine concealed, D. xi, 16; A. iv, 14; P. 18; head (21 mm.) 2.6 in standard length (56); depth (37) less than 2 in total length; eye (6) less than interorbital (8); mouth not reaching

eye. Pectoral short and rounded, caudal rounded. Chains of light-centred spots extend from back to belly in about eleven transverse rows. There are still traces of the light areas on the nape, below the front and back of the spinous dorsal, over caudal peduncle and above anal fin. Suprascapula covered with scales. Fourth dorsal spine longest, 14.5 mm.

This form grows to at least $2\frac{3}{4}$ inches in length, or 5 inches if it be the Silver Scat of the Brisbane River mentioned by Jensen (Monthly J. Aquar. Soc. N. S. Wales, iv, Aug. 1954, p. 5). It evidently ranges from Indonesia and the Gulf of Carpentaria, down the eastern coast of Queensland to New South Wales, rarely as far south as Sydney.

The form here figured from Brisbane River differs from the *Tholichthys* stage I figured from Port Denison (Rec. Aust. Mus. xvi, 1928, p. 217, pl. xviii, fig. 2) in having caudal rounded, scales more numerous and in fin-formulae. I there listed references to other figures of young "*Scatophagus*," most of which show the smaller larval and *Tholichthys* stages. To that list I now add:—

Blanco & Villadolid (Philip. J. Fisher. i, 1951, p. 80, fig. 19) who illustrate a 7.5 mm. juvenile *argus* from Luzon, and

Giltay (Mem. Mus. Roy. H. N. Belg. v, 3, 1933, p. 69, fig. 20), a *Tholichthys* from Triton Bay, New Guinea.

There are, however, a few illustrations of forms comparable with my Queensland ones in aquarium literature (notably Innes, 1935). I have not seen Stoye's 1932 figure quoted by Myers, 1936. Weber's figure (Siboga Exped. Monogr. lvii, 1913, pl. x, fig. 5) of a 32 mm. juvenile shows large spots like adult *argus* and is evidently of a different species from my 33 mm. one.

Thanks to Mr. J. Henry, Curator of the Macleay Museum, University of Sydney, I have been able to examine Macleay's specimens which were the basis of his Darwin record of "*Scatophagus tetracanthus*," a species nowadays known only from African waters. These fishes are conspecific with the figured Brisbane Scat. There are ten of them, fairly evenly graded from 32 to 48 mm. in total length. Dark vertical stripes extend down the sides almost to the exclusion of spots, even in the smallest.

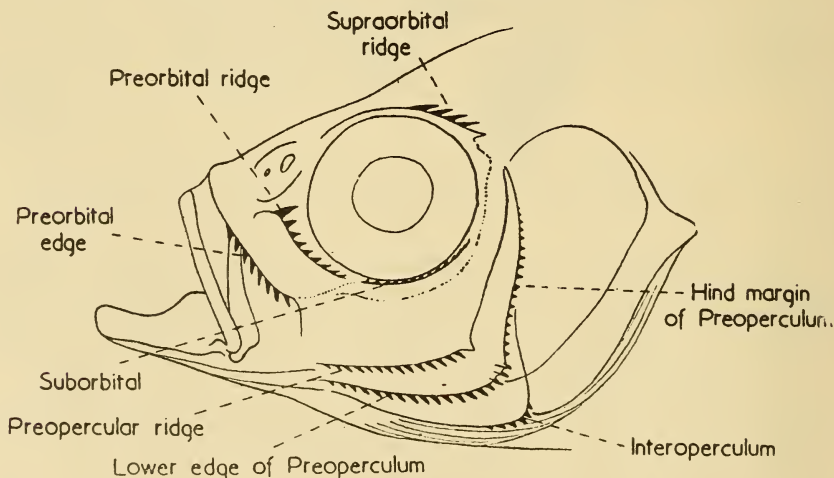


Fig. 3: Head of a *Chanda* Perch, showing ridges and edges of bones upon which denticulations of taxonomic importance may occur.

After Fraser-Brunner.

Family CHANDIDAE.

(Figures 3-6.)

The Chanda Perches, Percelles, Silver Spray, Doodies or Glassfishes are small, almost transparent perch-like fishes, found commonly in schools in fresh and salt water. They have been recently reviewed by Fraser-Brunner (Bull. Raffles Mus. xxv, 1954, pp. 185-213, figs. 1-4), from whose paper I have copied figure 3 which shows some of the characters used in classifying the species. They are useful as destroyers of mosquito-larvae and, in India, eat the tiny crustacean (Cyclops) which is the carrier of guinea-worm disease. Foreign species are well-known aquarium fishes, but Australia has a good variety of species from which the aquarist can choose.

KEY TO THE FRESHWATER CHANDIDAE OF AUSTRALIA.

A. Scales in 20 to 30 transverse rows. Two rows of cheek-scales. Lateral line developed, incomplete or obsolete.

B. Gill-rakers slender, 13 or more on lower limb of first gill-arch. Mucous pores on head inconspicuous. Body not banded.

C. Supraorbital ridge smooth, ending in a spine (rarely 2 spines). Length usually less than 3 inches.

D. Suborbital denticulate.

E. Hind margin of preoperculum entire.

F. Preopercular ridge entire, except for 2 spines at angle.

G/R. 18-20. Soft dorsal and anal rays 8-10.

Austrochanda macleayi

FF. Preopercular ridge denticulate. G/R. 24-26. Soft dorsal and anal rays 7-8.

Austrochanda pallida

EE. Hind margin of preoperculum denticulate.

G. Preopercular ridge scarcely denticulate. Second dorsal spine not longer than base of the spinous fin.

G/R. 18.

Blandowskiella agassizi

GG. Preopercular ridge strongly dentate. Second dorsal spine much longer than base of its spinous fin.

H. Soft dorsal and anal rays 7-8. G/R. 18. Colour plain.

Blandowskiella agrammus

HH. Soft dorsal and anal rays 9-10. G/R. 20. Each scale dark-margined, forming network; fins blackish.

Blandowskiella reticulata

DD. Suborbital entire. Murray R. system.

Blandowskiella castelnaui

CC. Supraorbital dentate posteriorly. Attains 4 inches in length.

Priopidichthys marianus

BB. Gill-rakers reduced stumps, 6 on lower limb. Mucous pores on head conspicuous. Lateral line obsolete. Body banded.

Denariusus bandata

AA. Scales 40 or more. More than 2 rows of cheek-scales. Lateral line continuous.

Acanthopercu gulliveri

BLANDOWSKIELLA RETICULATA (Weber).

(Fig. 4.)

Ambassis interrupta var *reticulatus* (sic) Weber, Nova Guinea, ix, 1913, pp. 574, 605 and 609 (Merauke and Lorentz R., N. Guinea).

Ambassis reticulatus Regan, Trans. Zool. Soc. Lond. xx, 6, 1914, p. 276 (Setakwa R., N. Guinea).

Id. Weber & de Beaufort, Fish. Indo-Austr. Archip. v, 1929, pp. 401 & 414, fig. 98, as *reticulata*.

Id. Nichols, Amer. Mus. Novit. 1433, 1949, p. 2 (Archer R. Q.).

Id. Fraser-Brunner, Bull. Raffles Mus. xxv, 1954, pp. 194 & 200. (Setakwa R., New Guinea).

Id. Whitley, Proc. Roy. Zool. Soc. N. S. Wales 1954-55 (1956), p. 41.

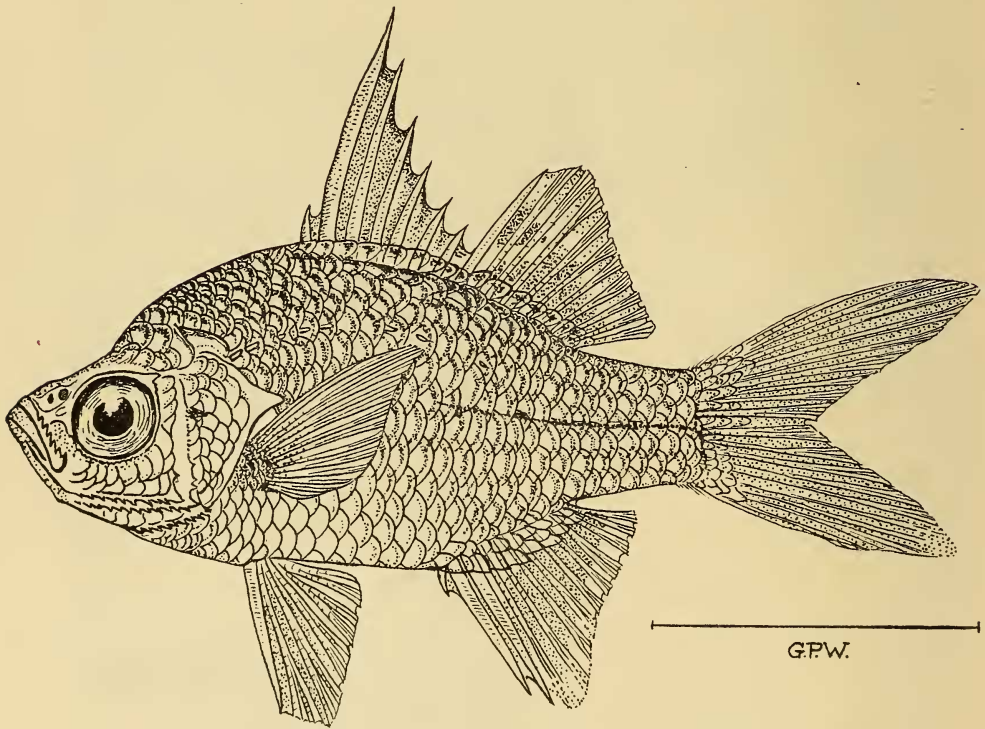


Fig. 4: Network Percelle, *Blandowskiella reticulata*, from Leichhardt River, Queensland.

Here figured from a specimen, 53 mm. in standard length, from the Leichhardt River, Gulf of Carpentaria, Queensland, collected in August 1928 by Dr. William Macgillivray (Austr. Mus. Regd. No. IA.3710). It has D. vii/i, 10; A. iii, 9; P. 14. Sc. 24. Tr. 3/1/10. Pred. 13. L. Lat. interrupted. G/R. 20.

Last dorsal membrane not *very* low on spine of second dorsal fin.
Denticulation of head and coloration as figured.

BLANDOWSKIELLA AGRAMMUS (Gunther).

(Fig. 5.)

Ambassis agrammus Gunther, Ann. Mag. Nat. Hist. (3) xx, 1867, p. 57.

Cape York, Queensland. Types in British Museum.

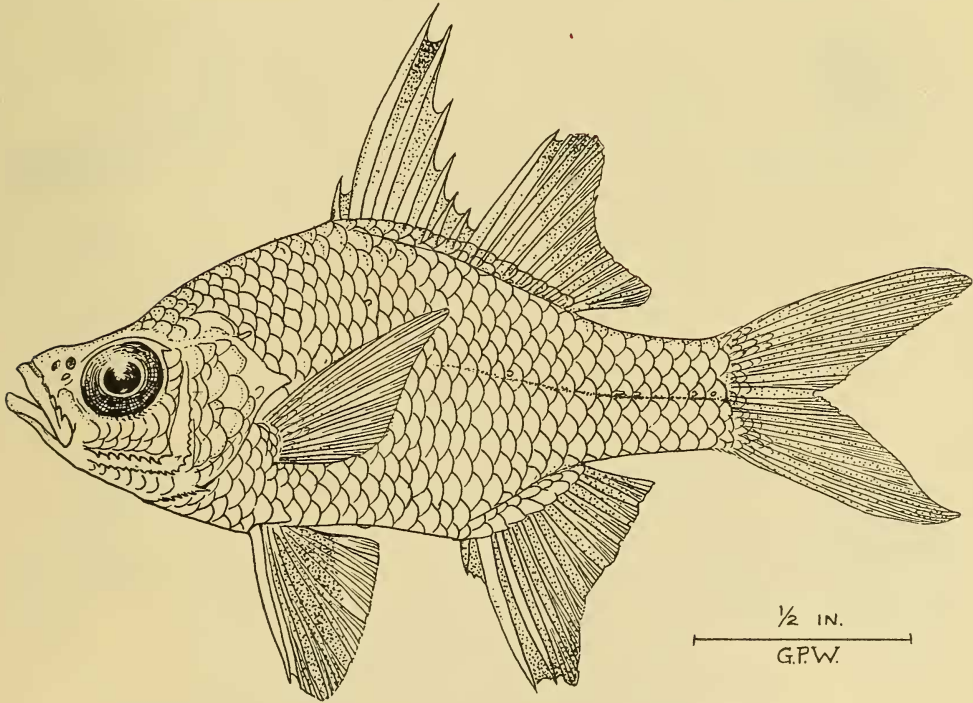
Id. Schmeltz, Mus. Godef. Cat. vii, 1879, p. 38 (Bowen, Q.).*Id.* Macleay, Proc. Linn. Soc. N.S.W. v, 1881, p. 338 and Desc. Cat. Austr. Fish. i, 1881, p. 38.*Id.* Ramsay & Ogilby, Proc. Linn. Soc. N.S.W. (2), i, 1886, p. 8 (south-east coast of New Guinea).*Id.* Weber & Beaufort, Fish. Indo-Austr. Archip. v, 1929, p. 411.*Id.* Fraser-Brunner, Bull. Raffles Mus. xxv, 1954, pp. 194 & 200 (lectotype, 42 mm. standard length, selected).*Priopis agrammus* Jordan & Seale, Bull. U.S. Fish. Comm. xxv, 1905 (1906), p. 255.*Id.* McCulloch & Whitley, Mem. Qld. Mus. viii, 1925, p. 147.*Id.* Whitley, Proc. Roy. Zool. Soc. N. S. Wales 1954-55 (1956), p. 41.

Fig. 5: Chanda Perch, *Blandowskiella agrammus*, from Townsville, Queensland.

Here figured from a specimen, from the Waterworks dam at Townsville, Queensland, 42 mm. in standard length (thus the same length as the lectotype selected by Fraser Brunner, 1954). It agrees with Gunther's description and has D. vii, i, 8, A. iii, 8; P. 12. Sc. 27. Tr. 16. Predors. 14. This species is very close to *reticulata*, but has plainer coloration, ventrals and anal fins infuscated, more scales round caudal peduncle, fewer finrays and gill-rakers.

BLANDOWSKIELLA AGASSIZI (Steindachner).

(Fig. 6.)

Here figured from the lectotype of *Pseudambassis nigripinnis* De Vis (Proc. Linn. Soc. N.S.W. ix, 1884, p. 393), a specimen nearly 2 inches long, from the Brisbane River, Queensland (Austr. Mus. Reg. No. I.396).

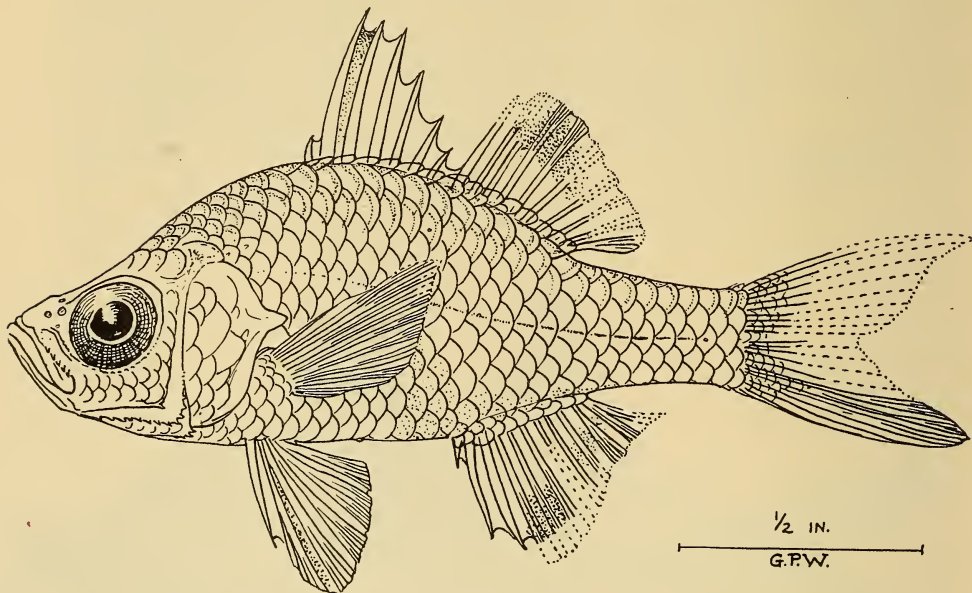


Fig. 6: Olive Perchlet, *Blandowskiella agassizi*. Lectotype of *Pseudambassis nigripinnis* De Vis from Brisbane River, Queensland.
Fins restored where dotted.

It has D. vii, i, 8; A. iii, 8; P. i, 10. Sc. 24. L. lat obsolescent. Tr. 12. Predors. 9. The dark markings have faded after seventy years or more in alcohol.

References and synonymy have been given by Whitley, Proc. Roy. Zool. Soc. N. S. Wales, 1953-54 (1955), p. 47, figs. 3-4, but the queried synonyms in that account may be regarded as separate species, following Fraser-Brunner (Bull. Raffles Mus. xxv, 1954, p. 194).

Family BODIANIDAE.

Genus CHOERODON Bleeker, 1845.

CHOERODON TRANSVERSALIS, sp. nov.

(Fig. 7.)

D. xiii/7; A. iii, 10; P. 2, 14; C. 12-main rays. L. lat. 28/29. Tr. 3/1/9. Predorsal scales 6.

Head (112 mm.) 2.8; depth (119) 2.6 in standard length (315). Eye (16) 6.7, preorbital (42) 2.6, interorbital (30) 3.7, snout (47) 2.3, postorbital (61) 1.8, pectoral (85) 1.3, and length of caudal (55) 2 in head.

Head about as high as long. Preorbital very high. Interorbital convex. Eyes small. Nostrils small, below eye-level. Behind the eye, two upright rows of scales are imbricate and increase below to up to 8 rows of cheek-scales which are not imbricate on lower cheeks. A few scales on nape, a single row

on interoperculum, and large ones on operculum; rest of head naked with some pimple-like pores. Cleft of upper lip reaching below hinder half of eye; lower lip deep. In front of the lower jaw is a pair of strong, blue, slightly curved, erect tusks; outside these fits a pair of more curved and more compressed, vertical (not flaring) canines from upper jaw. These are followed by a small lateral tusk in the lower and another in the upper jaw on each side. Other teeth fused into a lateral ridge. Posterior canines well developed. Preopercular edge very minutely serrated in places. Gill-membranes broadly united across isthmus.

Body deep, robust; scales with about 30 basal radii. Lateral line continuous, its tubes arborescent, except for a few simpler posterior ones. Predorsal scales begin on level with preopercular edge. Dorsal, anal, and caudal fins slightly sheathed by scales; auxiliary scales contribute towards the dorsal and anal sheaths.

Dorsal spines slender, stiff, pungent, the first (19 mm.) longer than eye; others increase in length posteriorly, the last 22 mm. Membranes incised and produced beyond the spines like pennants. Soft dorsal lobe rather pointed, longest ray 51 mm. First anal spine more than half length of others, third longest, 26 mm. Longest anal ray (54 mm.) reaches farther back than soft dorsal does. Pectorals broadly rounded, second branched ray extending beyond others, but shorter than head. Ventrals not quite reaching anal, pointed, asymmetrical; left, 66 mm., right, 68 mm. Caudal rounded.

Colour-description written 24 hours after the death of the fish by Messrs. T. C. Marshall and E. M. Grant: "General colour olive yellow. Head dull orange, suffused with yellow ochre. Each scale of the body with a vertical blue stripe. Spinous dorsal blue terminally, flame-colour subterminally, followed by strokes of blue and flame. Pectoral rays greenish, membranes smoky. Ventral rays blue, membranes bright orange. Anal blue with numerous elongate orange markings. Caudal dark blue with some traces of orange. Teeth pale blue."

The collector's colour-notes were provisional, as he hoped to secure more specimens: "Basal body coloration peacock blue to green above, shading to creamy white ventrally. Transverse irregular bands, about six in number,

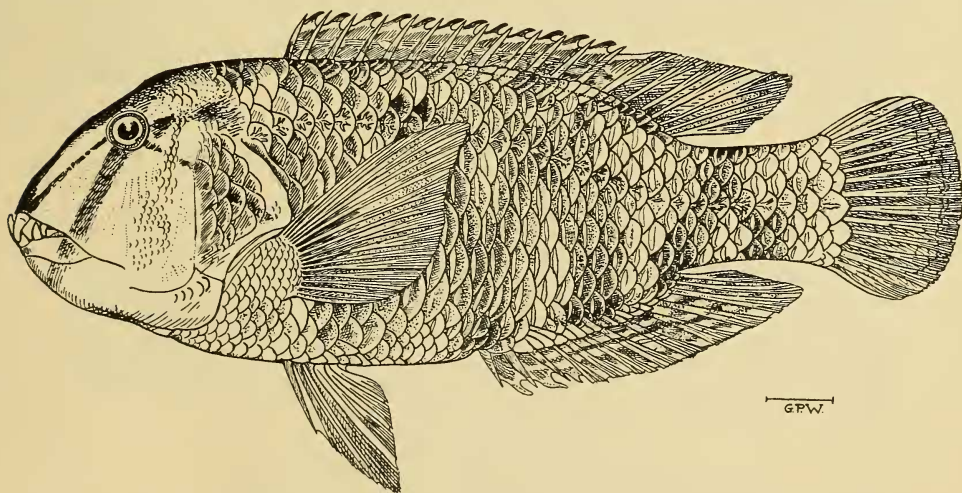


Fig. 7: Blue-toothed Tuskfish, *Choerodon transversalis*. Holotype from Heron Island, Queensland.

on body; colour pale brown, flecked with green. The head is similarly banded. A broad transverse band, the width of the orbit, runs across the nape, and continues below the cheek to fuse diffusely with that on the other side of the head. There are two narrower transverse bands across the lower orbital and nasal regions, and a narrow band running across the lower anterior cheek-region, from the sub-anterior orbit to posterior maxillary." Collected by E. M. Grant, April 1954.

The colours of the specimen have turned to brown in formalin and the evanescent patterns have almost vanished, but there are traces of several dark transverse bars, as figured here. A kodachrome transparency of the fish, kindly lent me by the Dept. of Zoology, University of Queensland, showed the following colours: Broad, anastomosing slate-grey to brownish-grey bands descend from back down head and body over a green background of various tones. Most scales behind pectoral with a vertical blue streak. Very bright green under chin to yellowish on cheek. Fins (folded) mostly dark slate-grey with some blue marks and with the body-bands apparently continuing on to them. Pectorals brownish with grey basal area and green and brown base. Pupil dark grey, iris pale green surrounded by blue ring.

Described and figured from the unique holotype, a specimen $14\frac{1}{2}$ inches or 370 mm. in total length. Australian Museum Regd. No. IB.3527; collector's No. 13.

Loc.—Heron Island, Great Barrier Reef, Queensland; 4 April, 1954. Presented by Mr. David Woodland, Dept. of Zoology, University of Queensland. Collected by Mr. E. M. Grant.

The erect canines, banded coloration and proportions separate this new species from all its congeners.

Choerodon valerensis Herre (Philip. Journ. Sci. lxxviii, 1949, p. 149), from the Philippines, is cross-banded, but in a different fashion and with brilliant orange and blue colouring; it has 8 predorsal scales and different proportions, but differs markedly in having no posterior canine, the soft dorsal equal to the spinous in height. *C. valerensis* has D. xii, 8; A. iii, 9; caudal 3.5 in head; eye 3.8 in head and little less than interorbital, according to Herre.

The genotype of *Choerodon*, *Labrus macrodontus* Lacepede, 1802 = *anchorago* (Bloch, 1791), has longer, more curved, lateral mandibular canines and different colour-pattern. In *C. cyanodus* (Richardson, 1843), as in *C. olivaceus* [= *albigena*] (De Vis, 1885), these canines flare out more. All other species are quite different: a list of Australian species was given by McCulloch (Austr. Mus. Mem. v, 1929, pp. 318-321), since which I have recorded some synonyms and described *C. paynei* Whitley, 1945, from Western Australia.

Family CREEDIIDAE.

Genus SQUAMICREEDIA Rendahl, 1921.

SQUAMICREEDIA OBTUSA Rendahl.

Squamicroedia obtusa Rendahl, K. Svenska Vet. Akad. Handl., lxi, 9, Feb. 14, 1921, p. 20, figs. 4-6. Cape Jaubert, Western Australia.

Id. Schultz, Journ. Wash. Acad. Sci. xxxi, 1941, p. 271.

The range of this fish may be extended to include the Northern Territory and Queensland. The Australian Museum has one (Regd. No. IA.7851) dredged on rope tangles off Charles Point, Northern Territory, in June 1938 by Mr. Melbourne Ward. Mr. R. Slack Smith obtained two from a coral clump on the reef flat at Heron Island, Queensland, on 12th January 1956, and noted the colours as "off-white with 4 reddish brown bars across anal." (Univ. of Queensland No. G.52; Austr. Mus. IB.3546).

Family GOBIIDAE.

Genus GLOSSOGOBIOUS Gill, 1862.

GLOSSOGOBIOUS SUPPOSITUS (Sauvage, 1880).

Eleotris obscurus Castelnau, Proc. Zool. Acclim. Soc. Vict. ii, 1873, p. 134. Fremantle, Western Australia. Name preoccupied.

Gobius suppositus Sauvage, Bull. Soc. Philom. (7) iv, 1880, p. 41. Swan River, Western Australia.

Eleotris castelnau Macleay, Proc. Linn. Soc. N. S. Wales v, 1881, p. 620. Swan River.

New name for *Eleotris obscura* (sic) Castelnau, preocc. by *E. obscura* Temminck & Schlegel, Faun. Japon., Poiss., 1845, p. 149.

Glossogobius vomer Whitley, Rec. Austr. Mus. xvii, 1929, p. 135, pl. xxxii, fig. 1. Swan River.

Eleotris obscurus Castelnau, preocc. = *E. Castelnau* Macleay is obviously a new and hitherto unsuspected synonym of *Glossogobius suppositus*.

Family BLENNIIDAE.

Genus NORFOLKIA Fowler, 1953.

NORFOLKIA SQUAMICEPS (McCulloch & Waite).

Gillias squamiceps McCulloch & Waite, Trans. Roy. Soc. S. Austr. xl, 1916, p. 449, pl. xli, fig. 1 and Waite, *ibid.*, p. 454. Lord Howe and Norfolk Islands.

Norfolkia lairdi Fowler, Trans. Roy. Soc. N. Zeal. lxxxi, 1953, p. 264, fig. 12. Norfolk Island.

Two specimens, up to $1\frac{7}{8}$ inches long, from Heron Island, Queensland, constitute a new record for Australia. One is in the Dept. of Zoology, University of Queensland (No. E.34) and the other in the Australian Museum (No. IB.3544). The life-colours were noted as "grey and white [barred], with red-tipped mouth."

Norfolkia lairdi is a new synonym of *squamiceps*.

Family CLINIDAE.

Genus CLINUS Cuvier, 1816, s.l.

CLINUS PUELLARUM Scott.

Clinus marmoratus Klunzinger, Arch. Naturg. xxxviii, 1, 1872, p. 33. Port Phillip, Victoria. Types in Nat. Sammlung, Stuttgart, seen. *Id.* Klunzinger, Sitzb. Akad. Wiss. Wien lxxx, 1, 1879, p. 392. *Id.* Macleay, Proc. Linn. Soc. N. S. Wales ix, 1884, p. 37. *Id.* Lucas, Proc. Roy. Soc. Vict. (2) ii, 1890, p. 29. *Id.* Whitley, Austr. Zool. x, 1941, p. 38, fig. 25 (type). Name preocc. by *Clinus marmoratus* Castelnau, Mem. Poiss. Afr. austr., 1861, p. 52, from Table Bay, South Africa.

Clinus puellarum Scott, Proc. Roy. Soc. Tas. lxxxix, 1955, p. 139, pl. i, fig. 1. Low Head, Tasmania.

I find that *Clinus marmoratus* is preoccupied but does not require a new name as it is evidently *C. puellarum*, as above. The species is found on both sides of Bass Strait.

Family DIODONTIDAE.

Genus CHILOMYCTERUS Barneville, 1846.

CHILOMYCTERUS ATRINGA (Linne).

Add to synonymy: *Diodon muricatus* Humphries, Museum Calonnianum, 1797, No. 1313.